Lauren Coartney

From: Abreu, Alberto <AAbreu@SempraGeneration.com>
Sent: Friday, March 04, 2011 5:45 PM
To: ECOSUB; catulewind@blm.gov
Cc: Fisher, Iain; Brown, Patrick; Rica Nitka; Miller, Taylor
Subject: ESJ US Transmission Comments on the DEIR/DEIS
Attachments: ESJ US Transmission, LLC CPUC-BLM DEIR-DEIS Comments.pdf

On behalf of ESJ U.S. Transmission, LLC attached are comments on the joint CPUC/BLM Draft EIR/EIS. The letter was also sent by overnight currier (FedEx), post dated today March 4, 2011, to: Dudek Consultants, 605 Third Street, Encinitas, California 92024. Please note that the FedEx also includes a CD copy of the DOE's Draft EIS document dated August 2010, which is not included in this e-mail version for reasons of size, but is an integral part of our submitted comments.

Should you have any difficulty opening this e-mail or its attachment or with receipt of the FedEx (or the CD therein included), please contact me.

Thank you.

Alberto Abreu
Director, Project Development
Sempra Generation
Tel: 619.696.2121

Energia Sierra Juarez U.S. Transmission, LLC

March 4, 2011

Mr. Greg Thomsen
Bureau of Land Management

Mr. Iain Fisher
California Public Utilities Commission

c/o Dudek Consultants
605 Third Street
Encinitas, California 92024 February 16, 2011

Re: Sempra Generation Comments on Draft Environmental Impact Report (DEIR) and Draft Environmental Impact Statement (DEIS) for ECO Substation, Tule Wind Project and ESJ Gen-Tie Line Project

Dear Mr. Fisher and Mr. Thomsen:

These comments are submitted on behalf of Energia Sierra Juarez U. S. Transmission, LLC ("ESJ") concerning the Draft Environmental Impact Report (DEIR) and Draft Environmental Impact Statement (DEIS) for ECO Substation, Tule Wind Project and ESJ Gen-Tie Line Project (hereafter the "DEIR/DEIS"). ESJ is the developer of the ESJ-Gen Tie line project. ESJ is indirectly- wholly owned by Sempra Generation. The DEIR/DEIS contains a very thorough and well-prepared analysis of the environmental effects of the ECO Substation, Tule Wind, and ESJ Gen-tie line projects and meets the requirements of the California Environmental Quality Act (CEQA). ESJ will limit its comments to the following topics for which we recommend changes in the DEIR/DEIS:

Environmentally Superior Alternative

Fire Risk

Cultural Resources

Visual Resources

Air Quality

ESJ will also provide additional comments concerning:

Biological resources
Connected actions
Project benefits
Recirculation

Environmentally Superior Alternative

The DEIR/DEIS concludes that the environmentally superior alternative for the ESJ Gen-Tie project is the Overhead Gen-Tie Alternative Alignment (DEIR/DEIS p. ES-23). ESJ agrees with this conclusion. However, the DEIR/DEIS also concludes that the environmentally superior alternative for the Project (ECO Substation, Tule Wind, and ESJ- Gen-Tie line combined) is the no project alternative (DEIR/DEIS p. ES-24) This alternative does not meet CPUC project objectives. The CPUC's identified project objectives as stated in the DEIR/DEIS are:

C-1 Accommodate delivery of renewable energy to meet state and federal renewable energy goals from wind and solar sources in San Diego County.

C-2 Meet California's RPS program requiring utilities to purchase 20% of energy from renewable sources by 2010.

C-3 Meet the Governor's Executive Order S-14-08 that increased the RPS goal to 33% by 2020.

C-4 Improve the reliability of power delivery to the communities of Boulevard, Jacumba and surrounding communities.

(Draft EIR/EIS at A-11).

Building nothing will not attain these objectives. Alternatives analysis under the CEQA and the National Environmental Policy Act (NEPA) is bound by a rule of reason and is limited to alternatives that meet fundamental project purposes. As stated in the DEIR/DEIS, "CEQA requires that the environmentally superior alternative be selected from a range of reasonable alternatives that could feasibly obtain the basic objectives of the project." (DEIR/DEIS p. E-31; CEQA Guidelines sec. 15126.6(a)). Further, the analysis does not adequately consider the environmental benefits of additional renewable generation serving the San Diego and Southern California region, such as reduced air pollution and greenhouse gas emissions related to electricity generation that would be foregone if the projects are not built. Additional comments on the benefits of the ESJ Gen-Tie line Project are set forth in a subsequent section of these comments.

Additionally, the statement in the DEIR/DEIS that "all environmental impacts associated with the construction and operation of the Proposed Project would be eliminated and existing environmental conditions would be unaffected" is contradicted by the statement on the same page that "if the proposed ESJ Gen-tie project were not constructed, it is likely that an alternative gen-tie would be constructed. The impacts associated with this gen-tie would be expected to be similar". (DEIR/DEIS p. E-31). Therefore, the DEIR concluded that the no project alternative was not environmentally superior. For these reasons, the Final EIR/FEIS ("FEIR/FEIS") should conclude that the environmentally superior alternative for the combined Project includes the ESJ Gen-Tie line Project Alternate Alignment and that the No Project Alternative is **not** the environmentally superior alternative for the combined Project.

Fire Risk

The DEIR/DEIS concludes that the ESJ Gen-tie line Project presents unavoidable significant impacts as to the risk of fire from the transmission line (Impact FF-2) and also with regard to fire protection response activities (Impact FF-3). ESJ disagrees with these conclusions and recommends that they be changed to Class II impacts.

Attached to these comments is an additional comment letter, dated March 3, 2011 from Mr. James Hunt, who is a former firefighter, Fire Department Chief Officer, and frequent consultant concerning fire protection planning, fire code consulting, firefighter training and emergency management issues (see Attachment 1). He concludes that the ESJ Gen-tie Line Project would not present a significant risk of fire ignition, fire spread, or impediment to fire protection activities. In summary, he notes that site vegetation conditions in the location of the ESJ Gen-tie line Project present a relatively low risk of fire ignition and fire spread, and presents only routine challenges to controlling a fire. He explains that fighting a fire in the area of a high-voltage transmission line is within standard firefighting procedures and training. He also notes that aerial attack for such a fire in the ESJ Gen-tie line Project is unlikely to be needed. For these reasons, and others included in Mr. Hunt's comment letter we recommend that the conclusions for impacts FF-2 and FF-3 be changed to Class II.

Though ESJ concludes that the impact of the ESJ Gen-tie line Project is insignificant for fire risk, and in an effort to address public concerns about fire issues in the East County, ESJ is nevertheless willing to participate in funding additional mitigation in proportion to the small degree to which its project components add to regional fire protection needs.

ESJ has entered into an agreement with the Rural Fire Protection District to provide Fire Protection Services for the ESJ Gen-tie line Project, and has completed a Fire Protection Plan which has been approved by the District.

In addition, the County of San Diego as well as representatives of the Tule Wind Project, have informed ESJ that an agreement for additional mitigation has been reached with the San Diego County Fire Authority. This agreement will provide additional mitigation by funding additional fire inspection capability for the County Fire Authority. Again, even though ESJ believes that the impact of the ESJ Gen-tie line Project is insignificant for fire risk, ESJ is nonetheless willing to participate in such an agreement to provide additional mitigation, provided that ESJ's financial commitment associated with this agreement is proportionate to the small degree to which the ESJ

Gen-tie line Project contributes to regional fire protection needs. The County of San Diego has assured ESJ that this would be the case.

Finally, as a result of these additional mitigation measures, consisting of funding of additional fire inspection capability and fire protection services, ESJ believes that these two measures address mitigation measure FF-6: Funding for FireSafe Council, since the agreements with the Rural Fire Protection District and the San Diego County Fire Authority address the provisions of FF-6 more effectively and directly.

Air Quality

The DEIR/DEIS includes that short-term air emissions associated with construction of the ESJ Gen-tie line Project are unavoidably significant (Class I) solely because of fugitive PM10 emissions. ESJ believes this conclusion is incorrect.

The calculations used by the PUC to evaluate PM10 emissions impacts were developed by ENTRIX (now CARDNO), DOE's consultant for preparation of the DOE DEIS document. Specifically, the CPUC used the calculated values included in the Draft EIS.

ESJ has worked with CARDNO consultants to evaluate and correct certain assumptions that were previously made in the calculations. The results of those modifications are included in Table 1 below. The specific assumptions and other factors that were modified to arrive at these revised emission estimates are contained in Attachment 2.

These revised calculations show that all of the Project's criteria emissions are below the respective significance thresholds. Specifically for PM10, peak PM10 emissions for the Project are estimated to be 84.5 lb/day of fugitive dust plus 3.5 lb/day of combustion particulates for a total Project PM10 emission rate of 88 lb/day and annual total PM10 emissions are approximately 2.0 tons. Thus, Project PM10 emissions are significantly below the U.S. EPA

transportation conformity significance threshold of 70 tons per year used in other CPUC DEIR's (which ESJ believes is the correct significance threshold to use in this case), and they are also below the significance threshold of 100 lb/day that was used by the PUC in its draft document. In either case, ESJ's air quality emissions are below the significance thresholds.

Table 1 - Estimated Maximum Construction Emissions[1]

Criteria Emissions	Peak lb/day	Threshold lb/day	Significant Yes/No	Total tons[2]	Threshold tons[2]	Significant Yes/No
Reactive Organic Gases (ROG as CH_4)	8.0	75	No	0.21	14	No
Carbon Monoxide (CO)	37.3	550	No	0.95	100	No
Oxides of Nitrogen (NO_X as NO_2)	74.0	250	No	1.92	40	No
Sulfur Dioxide (SO_X as SO_2)	0.1	250	No	0.00	40	No
Combustion Particulates (C-PM_{10})	3.5	100	No	0.09	15	No
Combustion Particulates (C-$PM_{2.5}$)	3.1	55	No	0.08	10	No
Fugitive Dust (F-PM_{10})	84.8	100	No	1.94	15	No
Fugitive Dust (F-$PM_{2.5}$)	15.7	55	No	0.34	10	No

Notes:
[1] Includes dust suppression measures required by the SDAPCD
[2] Entire project
Fugitive dust and combustion particulates are determined exclusively; C = combustion particle, F = fugitive dust
Sources: SCAQMD 2008, EPA 2011, SDAPCD 1998, ICAPCD 2007, CSD 2007

For these reasons, we believe that conclusion for air quality, should be Class II or Class III.

Visual Resources

ESJ agrees with the conclusion and the DEIR/DEIS that the ESJ Gen-tie line Project does not present an unavoidable significant impact.

ESJ notes that the PUC's conclusion that certain views of the ESJ wind turbine installations in Mexico are unavoidably significant is based on only two KOPs, which have a limited number of

viewers. These receptors are primarily limited to the topographically superior vantage points in southwest Jacumba near the water reservoirs and recreational motorists on a short section of Old Highway 80. We also note that for many viewers northwest of the ESJ wind turbine installations in Mexico, there would be an intervening 600 foot mountain (Airport Mesa) that would shield the turbines from view in the northern areas of Jacumba and sections of Old Highway 80.

Importantly, since the visual analysis was conducted, the intactness of the Sierra Juarez landscape has been compromised by the construction of the Parque Eólico La Rumorosa I wind energy project facility. This wind project was undertaken and funded by the Mexican government and consists of 5 - 2MW Gamesa G-87 wind turbines on approximately 78 meter towers (similar tower heights as will be used by ESJ), on land approximately 5 km (3 miles) away from the southern extent of the ESJ Wind Project. These turbines are currently visible from Old Highway 80, BLM lands, and the community of Jacumba. All five of the turbines have night lighting for aviation hazards.

This unconnected action has compromised the intactness of the landscape and the evaluation of the existing scenic quality should be lowered due to the presence of these new focal points on the silhouette of the Sierra Juarez Mountains. This lowering of the scenic quality baseline conditions would negatively alter the evaluation of the assessment of the level of contrast created by the ESJ Wind Project and its resultant effects on the visual environment.

The DEIR/DEIS should also discuss the fact that some wind turbines in Mexico will be partially or wholly hidden from view by intervening hills and freeway road cuts from some perspectives, including travelers on Interstate 8, Old Highway 80, and the community of Jacumba.

Therefore, based on the fact that the conclusion of significance was based on only two KOP's which are topographically superior vantage points, that there are natural obstructions (Airport Mesa) for many viewers to the northwest of the ESJ turbines which would shield them from view in northern areas of Jacumba and sections of Old Highway 80, and since the visual simulations were prepared, the intactness of the Sierra Juarez landscape has been compromised by the

installation of an unrelated wind turbine project, thus lowering the scenic quality baseline conditions in turn lowering the level of contrast created by the ES Wind Project, ESJ believes that the conclusion of visual impacts of the wind turbines located in Mexico should be changed from Class I to Class II.

Cultural Resources

The DEIR/DEIS concludes that impacts on cultural resources are not significant except for assumed impacts on Tribal Cultural Properties (TCPs). The DEIR/DEIS reasons that consultation with Indian tribes is not concluded and, therefore, TCP's could be present, could be significant, and could be impacted by the ESJ Gen-tie line project (D7 -34; D7-67). This conclusion is based upon layers of worst-case speculation rather than substantial evidence. The conclusion appears to have been repeated from the analysis of the Tule Wind Project rather than based upon a specific analysis of the ESJ tie-line Project.

Multiple tribal consultations have occurred with regard to be ESJ Gen-tie line Project. Notifications of all tribes identified by the Native American Heritage Commission were sent by the Department of Energy in the course of preparing the Draft Environmental Impact Statement ("DOE DEIS") for the ESJ Gen-tie Line Project. Consultation was requested by the Campo Band of Mission Indians, and a meeting with the Tribal Chairperson occurred on September 16, 2009. The Tribal Chairperson expressed satisfaction with the consultation at that time and considered it to be completed. No TCP's were identified.

In addition, the Quechan Tribe Historic Preservation Officer communicated with the DOE on November 30, 2009 stating that the ESJ Gen-tie line project appeared to lie outside the traditional land area of the Quechan Tribe and that the Quechan Tribe would defer to the Kumeyaay (Campo Band). Information concerning these consultations and records of communication are contained the Appendix D.1 of the DOE DEIS.

The CPUC and BLM should have a copy of the DOE DEIS prepared in conjunction with the ESJ Gen-tie - Presidential Permit Application and in fact have referred to it in the course of preparing their DEIR/DEIS. However, for completeness, ESJ is submitting a copy of the DOE DEIR/DEIS in the form of a CD (see Attachment C) and requests that it be included in the CPUC and BLM administrative record. Based upon this prior consultation on the identical project already analyzed in the DOE DEIS, substantial evidence is provided of no significant impact on TCPs for the ESJ Gen-tie Line Project. Therefore, the conclusion should be Class III, no impact.

Additional Topics

ESJ also provides comments below concerning additional topics covered by the DEIR/DEIS or that may arise in the course of agency review.

Biological Resources

ESJ generally agrees with the analysis and conclusions in the Biological Resources sections of the DEIR/DEIS, in particular that impacts on sensitive species from construction or operation of the ESJ Gen-tie line are not significant. ESJ suggests some additional information that should added to several sections of the DEIR/DEIS section D.2 on biological resources to clarify the analysis. Additions to the text follow:

Pg D.2-109

Regarding the existing conditions section addressing Peninsular bighorn sheep, the proposed ESJ Gen-Tie project site is located in a low-lying valley of flat contiguous habitat does not overlap with steep, rocky terrain preferred by the Peninsular bighorn sheep to the north, northeast, and west of the site.

Pg D.2-110 first paragraph

It should be noted that terrestrial mountainous species, likely use the Jacumba Mountains that are to the north, northeast, and east for regional connectivity. The mountain habitat is contiguous to the northeast and I-8 underpasses located across Devil's Canyon and In-Ko-Pah Gorge provide safe passage for terrestrial wildlife species to the south. Additionally, the division of the I-8 highway in these areas shortens the distance for at grade wildlife crossings. Although wildlife may use the proposed ESJ Gen-Tie project site for forage and cover, regional terrestrial movement across the valley floor where the ESJ Gen-Tie Project area is located is minimal due to the barriers described in the draft EIR/EIS and due to the options of connectivity and corridors located north, northeast, and east of the project area.

Pg D.2-110 second paragraph

It is unlikely that significant avian migration is funneled through the project area. The project area does not contain large bodies of water, wetlands, significant forest patches or other ecological resources that would attract large numbers of hawks, water birds, or songbirds to the area. Additionally, the open valley topography of the project site is not conducive to funneling avian activity in concentrated fronts unlike canyons and narrow valleys known to channel migration flights such as Butterbredt Spring (Schram 1998) in Kern County, California, which are not present in the Project site.

Pg D.2-171 first paragraph

The proposed ESJ Gen-Tie Project is unlikely to have an adverse impact on bighorn sheep given the permeability of the project design and because movement is likely concentrated within critical habitat that is located north, northeast, and east of the project area. The critical habitat area offsite contains contiguous mountain habitat for bighorn sheep movement and allows for regional movement between the U.S. and Mexico. There are minimal resources on the proposed project site that would attract sheep to this specific area. In the approximately 3 years that field evaluation activities have been taking place, ESJ project personnel (including environmental consultants) have never sighted a bighorn sheep in the gen-tie route during the three years they have been frequently visiting the area nor in the area where the wind turbines will be located in

Mexico. This is not surprising, given the high amount of human traffic in this area and specifically in the gen-tie area including by recreational shooters, the border patrol and others. The proposed ESJ Gen-Tie Project would have a minimal impact on avian migration because Project facilities do not provide a barrier for avian movement in the region.

Pg D.2-183 third paragraph

Concentrated large numbers of avian migrants are not likely to be funneled through the ESJ Gen-Tie Project area based on lack of ecological magnets or topographical features that would channel flight through the project area. Adverse impacts from the presence of transmission lines and towers are expected to be minimal.

ESJ also requests that Mitigation Measure 10(b) not be applied to the ESJ Gen-tie line Project. This measure appears to have been developed for the Tule Wind Project. The wildlife resource agencies have not expressed concern with collision or electrocution impacts related to the ESJ Tie-line Project. Therefore we do not believe the avian protection plan provided by Measure 10(b) is applicable to the ESJ Project.

Connected Actions

ESJ generally supports the approach taken in the DEIR/DEIS with regard to connected actions and the determination that the Sunrise Power link is not a connected action. We also agree that the new line to the Boulevard Substation is not a connected action. One fundamental basis for these conclusions is that these projects do not depend upon ESJ and have independent utility.

The Sunrise Powerlink will improve reliability of the SDG&E system and facilitate transmission of power from renewable projects to San Diego and Southern California regions (CPUC Final Decision 08-12-058 - Granting Certificate of Public Convenience and Necessity for the Sunrise Powerlink Project, dated December 24, 2008, section 3.1).

The ECO Substation and Boulevard line also have independent utility since they are intended, among other things, to improve reliability of electrical service in the area and facilitate interconnection of other renewable projects in the region. (SDG&E Proponent's Environmental Assessment, page 2-9). In any event, both projects are fully analyzed in the DEIR/DEIS.

The Sunrise Powerlink project was exhaustively analyzed in its own FEIR/FEIS which included the ESJ Gen-tie line Project as a connected action. There is no need to analyze it again in the ECO Substation EIR/EIS. Therefore, the Sunrise Powerlink project is appropriately treated as a cumulative impact topic in the PUC's ECO DEIS/DEIR.

Benefits of the ESJ Gen-tie line Project

ESJ believes, as noted above, that various topics within the analysis of impacts for fire, air quality, cultural, and visual impacts should not be classified as Class I, unavoidably significant impacts.

ESJ also notes that pursuant to CEQA section 21082.2(e), decision making agencies may make their own determinations with regard to significance of impacts supported by substantial evidence. However, in event that any impacts of the ESJ Gen-tie Line Project are determined to be unavoidably significant, ESJ believes that a decision making agency could readily find that the economic, legal, social, technological or other benefits of its project clearly outweigh any such limited residual impacts.

Benefits of the ESJ Gen-tie Line Project include:

- Jobs: Construction of the ESJ Gen-tie Project is expected to employ 20 to 25 workers. Constructors and trucking firms from San Diego would likely serve a portion of the

equipment delivery and construction requirements for wind turbine facilities in Mexico as well.

- Purchases: Project construction will require purchases of equipment and supplies within San Diego County. With respect to the entire Project, additional purchases will also occur in other areas of the United States. These could include items such as wind turbines, wind turbine blades, transformers, electrical equipment and other materials. ESJ also intends to purchase water to be used for dust suppression during construction from the Jacumba Community Service District.
- Taxes: The project would increase sales and property tax revenues to San Diego County.
- Renewable Energy: The ESJ Gen-tie Line Project will interconnect with the ESJ Wind Project in Mexico and enable delivery of renewable energy from that project to the U.S. grid for delivery to California based electric utilities. These power deliveries will contribute to satisfaction by these utilities of mandates under California law to increase the portion of electricity produced by renewable generation sources. This in turn reduces dependence on fossil fuels which is an established public policy goal in California and nationally. Renewable energy mandates and the present status of the California requirements for procurement of renewable energy are further discussed in the DEIR/DEIS pages A-7 to A-8.
- Air Pollution and Greenhouse Gas Reductions: Renewable sources of generation, such as wind, produce no air emissions during operation. Therefore, to the extent such generation displaces fossil fuel generation which either exists or would need to be built, it produces a net reduction in electrical system emissions. A discussion of this effect is set forth in the DOE DEIS, pp. 3-145 to 3-146, and incorporated herein by reference.

Recirculation

As is often the case, project opponents may recommend recirculation of the DEIR/DEIS. ESJ does not believe such recirculation is warranted. Recirculation is required in limited

circumstances of "substantial new information" and other narrow categories set forth in the CEQA Guidelines, section 15088.5. ESJ is not aware of any substantial project changes or evidence of other matters that would trigger the need for recirculation. It is important to note that recirculation is not required just because numerous comments are submitted which require additional analysis to be included in the Final EIR.

ESJ is also concerned about project delays. ESJ understands that the County of San Diego currently intends to utilize the ECO DEIR/DEIS in the course of its review of ESJ's required application for a Major Use Permit from the County. To the extent that the ECO DEIR/DEIS is delayed, the ESJ Gen-tie Line Project is also delayed and the benefits of delivering additional renewable energy to the San Diego region are also delayed.

We believe that the CPUC and BLM should take enough time to adequately respond to comments on the DEIR/DEIS and improve or revise the analysis to the extent necessary in the FEIS. However, the CPUC is not required to start the commenting process over again and indeed there is no reason to. This is particularly evident for the ESJ Gen-tie Project, which has already been analyzed in detail in two other Environmental Impact Statements -- once in Sunrise Powerlink FEIR/FEIS and once in the DOE DEIS.

Thank you for the opportunity to comment and for a thorough and well-prepared DEIR/DEIS document. Please contact me if you have questions concerning these comments.

Sincerely yours,

Alberto Abreu

Cc: Patrick Brown

Attachment 1

Hunt Research Corporation
Founded 1979
JAMES W. HUNT, President

3-3-11

Dr. Fisher (CPUC) and Mr. Thomsen (BLM)
c/o Dudek
605 Third Street
Encinitas, California 92024

Re: Comments regarding the ECO Substation, Tule Wind, and ESJ Gen-Tie Project Draft EIR/EIS, Section D.15, Fire and Fuels Management

Dear Dr. Fisher (CPUC) and Mr. Thomsen (BLM):

Thank you for the opportunity to provide the following comments on the Draft Environmental Impact Report/Environmental Impact Statement for the East County Substation/Tule Wind/Energia Sierra Juarez Gen-Tie Projects (Draft EIR/EIS).

My name is James W. Hunt, and I am the principal of Hunt Research Corporation. I have 48 years of experience in fire protection, including as a firefighter and Battalion Chief/Incident Commander with major fire departments, an adjunct faculty member/ instructor in various subjects including firefighting, fire service management, emergency management, and Incident Command System (ICS) for the FEMA National Fire Academy and State Fire Academy, the University of California, Santa Barbara, and California State University, Long Beach. I have also served as a Fire Department Training officer. I have 32 years experience as a fire protection consultant.

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The following are my comments, observations, and suggestions regarding certain information in Section D.15, Fire and Fuels Management, of the Draft EIR/EIS. They are provided with the objective of offering possible revisions to help the Draft EIR/EIS to present an objective, real-world review of the net fire risks associated with the ESJ Gen Tie project. These comments are limited to the ESJ Gen Tie project.

Sempra Energy requested that I review the Draft EIR/EIS, Section D.15, Fires and Fuels Management, insofar as it relates to the ESJ Gen Tie Project, and provide any comments as a third-party reviewer. I have the following comments:

1. Page D.15-57: ESJ Gen Tie Project: Electric Transmission Line; Potential Wildfire Ignitions

I disagree with these two paragraphs regarding the risk of the transmission lines. The EIR overstates the risks. Transmission lines of this type have excellent safety records and are designed to withstand high winds. They are on steel (non combustible) towers. The extensive fuel modification proposed in the Right Of Way (ROW) will comply with all Fire Code and Fire Agency requirements, and there will be no contact between vegetation and power lines. This should result in an insignificant probability of ignition of vegetation. The vegetation around the power line ROW is relatively light and will be even less after fuel modification. Biologists for EDAW estimate the vegetation coverage at about 35% (5-19-09 letter from Michael Page, EDAW, to J Heredia; Sempra). This indicates that the vegetation has broken continuity rather than solid unbroken continuity. Broken continuity assists in not spreading fire from bush to bush. The National Fire Protection Association (NFPA) study" Brush, Grass and Forest fires", August 2010, states that out of the total wildland fire data analyzed in the study, only 4% were caused by electrical power/utility lines. It also states that local Fire Department responses to wildland fires for pipelines, power lines, and other utility rights of ways account for only 1% of the fires. This is an insignificant percent of the total wildland fires.

Please refer to the approved Fire Protection Plan, which I prepared, for the proposed mitigations. See attached. The Plan was approved by the San Diego Rural Fire Protection District, by letter dated 7-15-09. All comments/corrections issued by the San Diego County Fire Authority Fire Marshal regarding the FPP were made in the revised FPP, as acknowledged in their November 25, 2009 letter.

Power lines, like the 230kV and 500 kV alternatives proposed by ESJ, are unlikely to be the source of spark resulting in a wildfire. A line break is a very rare occurrence and should not reasonably be assumed. Additionally, vegetative contact with the gen-tie is very unlikely to occur because the vegetation in the area is such that it will not grow sufficiently so as to reach the electrical line. The major fires in 2007 in San Diego County did not involve high voltage lines, as stated in the Draft EIR/EIS page D.15-11. Further, the distance from the nearest residence, including a trailer, to the ESJ gen-tie is approximately one-half mile away, while the nearest population center (Jacumba) is approximately 4 miles away. Fire protection personnel and equipment are located at The Rural Fire Protection District Fire Station #43 in Jacumba, approximately 4 miles/ 7 minutes driving time from the proposed project. Thus, the potential for either of the two alternative lines proposed by ESJ to be the source of ignition causing a wildfire is very small, and is manageable. As such the potential risk of fire related to the Gen-tie line should not be classified as unavoidably significant, in my opinion.

2. Page D15-62-: Section D.15.3.1: Obstructions to Fire Suppression Efforts; Ground Based Firefighting:

The obstructions to fire suppression efforts are overstated by the EIR. In my opinion, as a former Firefighter and Chief officer, who has responded to power line incidents, the project does not create any obstruction to fire suppression efforts. I can also state as a former Fire Department Training Chief that firefighters have extensive training and experience in handling incidents involving power lines, including those relating to a downed power line. CALFIRE has specific tactics for handling such incidents, which includes their "Three Stripes Policy" of flagging off the area and staying 25 feet back

from a downed line until there is confirmation the power is off. Any vegetation fire caused by an arcing wire would be controlled by firefighters and contained to the right of way. The fire in the Right Of Way (ROW) in proximity to the downed wire can be allowed to burn out. The fuel modification in the ROW should prevent any potential for arcing to ground (phase to ground shorts). Water would not be directed onto the power lines. Such types of emergency calls are not challenging incidents, especially in a sparsely populated rural area such as this. The Fire agency response to any fire on the ROW will be more than adequate to handle the incident.

3. DE.15-63: Section D.15.3.1: Aerial Firefighting:

It is my understanding that the area of the ESJ-Gen-tie project would not be considered an automatic "no fly zone" by CALFIRE after the project is built. Determinations regarding use of aircraft on a fire would be made on a case-by-case basis. (per conversation with Fire Chief Nissen, Rural Fire Protection District 2-28-11, who spoke with Battalion Chief Ray Chaney, CALFIRE, who is in charge of their Air Operations program). The provision of the required Fuel Modification Zones in the ROW should result in a relatively slow burning fire with low flame lengths. Aerial attack is therefore unlikely to even be needed due to the light vegetation and the fuel modification. Fire fighting aircraft would not make water or retardant drops through power lines. Any downwind ignition caused by airborne embers could be readily extinguished by fire companies. As stated earlier, the power lines should not obstruct firefighting operations, as the tactic will be to confine the fire to the ROW and immediate area by flanking the fire, without going under power lines. Effectiveness of ground and aerial firefighting should not be affected.

4. Table D.15-7 and Section D.15.6.1: Underground alternative:

In my opinion, the risk presented by overhead, cross-country, power transmission lines is low. Such lines run all over the country, over freeways, and other structures and have a

very good record. I see no valid reason to put these overland high transmission lines underground, because of the low fire risk and unpopulated rural area.

5. Summary:

With the inclusion of the safeguards included in the required and approved Fire Protection Plan (FPP) and with compliance with all local and state requirements for power lines, it is my opinion that this power line installation will not present a significant fire risk.

Respectfully submitted,

James W Hunt
Hunt Research Corporation

Resume

James W. Hunt
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March 2011

EXPERTISE:

Fire Protection Planning, Fire Code compliance, and Risk Analysis for residential, institutional, commercial, industrial and petrochemical and energy related developments. Wildland Urban Interface Fire Protection Planning, Vegetation Management plans, Hazardous Materials Management, Standards Development, Plan Review, Emergency Planning and Risk Management. Risk Management Plans, Business Plans, Hazardous Materials Management Plans, scenario based corrective actions, Fire Station location studies, Fire Department Strategic Plans, Fire safety elements of EIR's and General Plans.

FIRE SERVICE EXPERIENCE:

48 years extensive Fire Service related experience in Southern California. 16 years Fire fighting experience. Served in all Fire Service ranks including Battalion Chief with the City of Huntington Beach.

Responded to and commanded numerous structural, petroleum, hazardous materials, EMS and wildland emergencies, as a Captain and Chief Officer.

Served as Fire Department Training Officer and Assistant Fire Marshal. Established and enforced new development conditions for numerous petroleum and hazardous materials facilities. Designed and enforced Fire codes and standards in petroleum and hazardous materials facilities. Have served as an instructor in the field of emergency management, ICS, firefighting, fire protection and fire prevention, since 1967.

CONSULTANT EXPERIENCE:

President of Hunt Research Corporation since 1979. Specializing in Risk Management, Fire Protection Planning, Fire Vegetation Management Plans, Fire Code compliance, Emergency Planning and Hazardous Materials Management. Serve as consultant to governmental agencies and industry. Extensive experience

conducting Fire Department studies, Preparing Strategic Plans, and conducting Fire Station location studies.

Fire Protection Projects Involving Commercial, Industrial, Residential and Institutional Facilities:

Extensive experience in Hazard Analysis, Risk Assessment, Fire Code compliance, and Fire Protection planning for oil and gas facilities, refineries, pipelines, airports, water treatment facilities, chemical plants, power plants, energy related projects, hazardous materials users, Storage facilities, plating plants, LNG facilities, Hydrogen gas plants, solar plant, wind farm, and other industrial/commercial facilities, retirement communities, shopping centers, institutions, residential developments in wildland/urban interface areas. Review of detailed Fire protection system and equipment plans and specifications. Project consultant for all stages of development including Environmental Impact Reports, Specific Plans, planning and plan review. Produce Fire Protection plans, Vegetation Management plans, Business Plans, Hazardous Materials Management Plans, and Risk Management Plans. Develop Public Safety elements for General Plans. Conduct Fire Station Location Studies. Conduct vegetation and Structural Risk Assessments of Communities. Have extensive background in planning and specifying Fire protection equipment systems and procedures for protection of complex fire risks, P&ID review and review of various documents for compliance with codes and standards, and the review of process safety and Fire prevention procedures.

Project Involvement:

Have been involved in projects for the following companies as a consultant for the company or the local governmental agencies. Some of those projects include the following:

Commercial, Industrial, Residential:

Camino Real Marketplace Shopping Center
Chevron Texaco Hydrogen Fuel Processor Test Facilities
Western LNG Facility: Southern California Gas Company
Union Pacific Railroad LNG Facility (Los Angeles)
Burlington Northern Santa Fe Railroad Tank Farm (Los Angeles)
Sempra Energy company
Blythe Solar plant
Iberdrola Wind Farm
County of Santa Barbara
Los Angeles County Fire Department
Hyatt Hotels
Red Lion Hotels
Sheraton Hotels
Hampton Hotels
Santa Barbara Resort and Spa
Santa Barbara Botanic Garden

Heritage House assisted living facility
Maravilla Retirement Community
Spectrum Chemical Company
Valley Plating Works
Reno International Airport
Pacific Offshore Pipeline Company
Coastal Oil & Gas
Conoco Oil
Exxon USA
General Motors Corporation
Mobil Oil Company
Chevron USA
Texaco
All American Pipeline Company
Phillips Petroleum
Shell Chemical Company
Husky Oil
Atlantic Richfield Company (ARCO)
ARCO L.A. Refmery Hydrogen Plant
Unocal
Mariposa Pipeline
Pacific Pipeline
Stocker Resources Inc. Gas Plant
Hallidor Petroleum
Colton Bishops Storehouse
Tidelands Oil Production Company
Delco Electronics (Hughes Aircraft)
Los Angeles Department of Water & Power
Gruber Engineering
Wilco Products
City of Santa Cruz Golf Course
AMV AC Chemical Company
Shell Equilon Chemical Company
Molino Energy Company
Benton Oil & Gas Company
Air Products & Chemical, Inc.
Standard Pacific properties
Spring Pacific Properties
Signature Properties
Bluegreen West
Providence Landing Project
Reliant Energy Power Plant; Casagrande Arizona
Duke Energy Power Plant; Morro Bay
Otay Mesa (Cal Pine) Power Plant; San Diego
AES Power Plant; Huntington Beach
Blythe Power Plant

Vernon Power Plant
Orange Grove Power Plant; Fallbrook
Lagasse Brothers Janitorial Supply
Reinhold Plastics
Los Angeles Chemical Co, South Gate
Royal Paper Co., Santa Fe Springs
Flint Group Ink Company; Santa Fe Springs.
Sonoma County Hazardous Waste facility
J.B Dental Supply; Carson Cal and Coppell Texas
Roland Corp; Commerce Cal
Burlington Northern Santa Fe Modular Trailer storage facility; Commerce Cal
Burlington Northern Santa Fe Rail /truck loading facility; Los Angeles
Imation Corp, Camarillo
Kemiron Pacific, Fontana Cal
Vulcan asphalt plant; East Otay
Emultech asphalt tank farm; West Sacramento
CCA prison; East Otay
Texaco Global Energy
Miller Brewing Company
MSE Environmental; Camarillo Calif.
General Plating Co, Commerce Calif
LDS church project; Fallbrook Calif
Pinamonte Development; Fallbrook Calif
Shea Homes
Covington Development
Centex Homes
Cypress Land Co
Zurn Products
Galaxy Botanicals Co, Oxnard
Yosemite Plaza Shopping Center; Groveland Cal
Barona Reservation; San Diego County
Viejas Reservation; San Diego County

Numerous additional clients for residential, industrial and commercial Fire Protection and Vegetation Management Plans in the Urban Wildland Interface areas (over 150 completed).

Emergency Planning Projects:

Experience includes Risk Assessment, writing and reviewing emergency response plans, spill response plans, emergency checklists, design of Incident Command Systems, Standardized Emergency Management Systems (SEMS), Emergency operations center design, exercise design, conducting major exercises. Have designed or reviewed emergency plans for major nuclear facilities, petroleum installations, government agencies, high rise and hotels. Have designed model emergency response plans for government and industry. Have taught Incident Command System and emergency management courses throughout the country, since 1975. Introduced the Incident Command System to the Federal Emergency Management Agency (FEMA) National Fire Academy in 1980. Co-inventor of the nationally used "Incident Command System" vests, and mobile command post hardware.

Project Involvement:

Have been involved in projects for the following companies as a consultant to industry or government (refer to next page)

City of Ventura
County of Ventura Public Health
Los Angeles County Jail
City of Huntington Beach
County of Santa Barbara
City of San Luis Obispo
Livermore Nuclear Laboratories (DOE) (held a secret clearance)
Chevron USA
Exxon USA
Texaco
Shell Oil Company
All American Pipeline Company
Unocal Corporation
Pacific Offshore Pipeline Company
ARCO Oil & Gas
Hallidor Petroleum
Diablo Canyon Nuclear Plant
City of Dallas, Texas
Red Lion Hotels
Cuesta College
Santa Maria School District
Molino Energy Company
Santa Barbara Club Resort & Spa
Casa Grande Arizona Fire Department
Karl Stortz Imaging
City of Azusa

EDUCATION & CERTIFICATION

Associate in Arts Degree	Police Science	1963
Associate in Arts Degree	Fire Science	1966
Lifetime Instructors Credential;	State of California	1976
Bachelor of Science Degree	Fire Science	1985
National Fire Academy	Graduate	1989
Hazardous Materials Management Specialist	Certificate	1990
Professional Fire Safe Inspector	California	1999
California State Fire Academy	Graduate	1996

COMMITTEE MEMBERSHIP

- Fire Prevention Officers Association: Flammable Liquids & Gases, & Wildland-Urban Interface Fire code committees;
- U.S. Task Force on Sheltering-in-Place During Hazardous Materials Emergencies; EPA/FEMA

* Santa Barbara Fire Safe Council
* Western Fire Chiefs Association Wildland-Urban Interface Planning Task Force:
* Community Awareness & Emergency Response (CAER) Santa Barbara County.
* National Fire Protection Association Wildland Fire Management Section.

PUBLICATIONS

- 18 articles in National Fire Protection publications regarding hazardous materials and other fire protection issues;
  Book: *Development Strategies in the Wildland-Urban Interface* (WFCA 1991);
- Four nationwide training courses for the National Fire Academy;
- Multi-Agency Oil Spill Response utilizing the Incident Command System "Occupational Health & Safety Magazine" June 1993.
- Book: *"The I Zone: California's Mitigation Strategies"* (State Fire Marshal; 1996)
  Paper: *"Scenario Based Fire Protection Planning for New Development"* presented to the California Fire Prevention Officers Institute (Jan 2002)

ADJUNCT FACULTY INSTRUCTOR AND CURRICULUM DEVELOPMENT EXPERIENCE:

- FEMA (Dept of Homeland Security) National Fire Academy
- California State Fire Academy
- California State Fire Service Training
- UCSB
- Long Beach State University
- Santa Barbara City College
- Hancock College
- Bakersfield College
- Idaho State Fire Service Training

9-10-09

David Nissen
Fire Chief
Rural Fire Protection District
14145 Campo Rd (Highway 94)
Jamul Calif 91935

County of San Diego
Department of Planning and Land Use
Paul Dawson
County Fire Marshal
5201 Ruffin Road, Suite B
San Diego Cal 92123

Gentlemen:

Subject: **SHORT FORM FIRE PROTECTION PLAN; LETTER REPORT; REVISED.**
Energia Sierra Juarez U.S. Transmission Gen-Tie Project (ESJ Gen-Tie.); Jacumba

1.INTRODUCTION:

This revised Fire Protection Plan letter report is being submitted as an evaluation, pursuant to the requirement of the Rural Fire Protection District (RFPD) Fire Chief, and the County DPLU, of the adverse environmental effects that the proposed Energia Sierra Juarez Gen-Tie (ESJ Gen-Tie) project may have from wildland fire and mitigation of those impacts to ensure that the project does not unnecessarily expose people or structures to a significant risk of loss, injury or death involving wildland fires. The use of the short form Fire Protection Plan has been approved by RFPD Fire Chief David Nissen, and by the DPLU County Fire Marshal, Paul Dawson. Revisions in the original plan, dated 5-22-09, have been made in this edition to comply with the comments of 7-15-09, from the DPLU Fire Marshal. The RFPD has approved this Fire Protection Plan.

Emergency Response:

The project is within in the Rural Fire Protection District, who is the "Authority Having Jurisdiction". Staffing is by CALFIRE. Initial response is provided from Fire Station 43 at 1255 Jacumba Street, in Jacumba. Response distance is approximately 4 miles. The staffing currently includes two firefighters 24/7 year around plus 4 volunteers. This station has the following apparatus: A 1,000 GPM structural fire engine and a 1,800-gallon water tender. This station currently responds to about 7-10 calls per week. The additional responding Fire Companies for emergencies, are:

- CDF Whitestar Fire Station in Campo (staffed 24-7; CDF Schedule A contract).
- Campo Indian Reservation Fire Department.
- Boulevard Volunteer Fire Department; Volunteer.

The next closest Rural Fire Protection District Fire Engine is Lake Moreno, which is about a 20-minute response. This is also a volunteer Fire Station.

Other Fire Companies are available as needed per the County and State Mutual Aid response agreements.

2. PROJECT DESCRIPTION:

The ESJ Gen-Tie project is a high voltage generator tie line to connect new renewable wind power in Northern Baja Mexico into the existing Southwest Power Link transmission line. The line would be either a single circuit 500 kV line or double circuit 230 kV line, a fiber optic line, and a grounding cable, supported on steel lattice or steel monopole towers. Towers have a concrete base. There would be 3 to 5 structures up to about 150' high for lattice towers and up to 170' high for monopoles. There are no buildings. The Right of Way (ROW) is less than 1 mile long from the International Border to the terminus in the U.S. at a proposed San Diego Gas and Electric Co. (SDG&E) East County substation (ECO Substation). The ECO substation is 3.75 miles east of Jacumba, and is south of the Old Highway 80. The facilities in Mexico are out of the scope of this report and the proposed SDG&E substation would be subject to separate fire protection approvals

3. ENVIRONMENTAL SETTING:

Location:

The site is in the O Neil Valley, approximately four miles Southeast of Jacumba and adjoining the border. This is Thomas Guide page # 430. It is approximately 2 miles southeast of the closest stick built structures. There is a trailer 0.28 miles southwest of the proposed 230 KV Gen-Tie line. The State CALFIRE FRAP fire hazard classification maps classify this area as a "Very High Fire Hazard Area".

Topography:

The average slope of the property is less than 15%. The actual Right of Way appears to be substantially flat with a slight sloping. There are no hills on the right of way. There are hills offsite.

Geology:

Soil in the ROW appears to be dirt. The legal property access road would be a 24-foot wide dirt road, with a DG surface (see Section 5 below) leading from Old Highway 80 to the power line tie in to the future SDG&E substation.

Flammable Vegetation:

The vegetation on site is considered Semi-desert Chaparral. It appears to be a BEHAVE fuel model SH-2. It is observed to be about one foot high with some jackpots that are about five foot high. It has some spacing between vegetation. Refer to site photos attached.

Climate:

The temperatures in this area can reach an extreme maximum temperature between July and October. The maximum recorded temperature occurred in July, with a temperature of about 112 degrees f. Average maximum temperature in July-September was 92 degrees f in August. Winds used in the fire models were 50 mph at 20' for a fall fire and a 20-foot wind speed of 25 mph for a summer fire. Therefore wind driven fires can occur in times when weather is hot and fuel moistures are low. A 1000-acre fire started in Mexico burned across this site in 2006. Flame lengths were reportedly about 15'.

Environmental Issues:

EDAW, Inc, the Biology and Archeology consultant for ESJ U.S., reports that there is sensitive habitat (vegetation and wildlife) present in the Right Of Way. They also state there are Cultural sites in the Right of Way. Therefore, per EDAW, fuel modification cannot be done in areas of the Cultural sites, and machinery cannot be used for fuel modification along the ROW. Fuel Modification (other than the 30' around towers which would be done) cannot be done without providing required offsetting mitigation.

4. WATER SUPPLY:

There are no buildings involved in this project and therefore there are no water requirements.

5.ACCESS ROADS:

Location:

The Fire access road would be off Old Highway 80, and would be a dirt road. It will be a twenty eight foot (28') graded width which shall be improved to about 24' in width with decomposed granite (DG) where it connects from old Highway 80 to the power line tie in (this project) to the future SDG&E substation. A turnaround will be required within 150' of the termination of the road at the substation. Consultant recommends that this

preferably be at the termination of the road. A 20' wide, dirt, access road will be provided along the right of way for maintenance of the Gen-Tie line and for patrolling of the property. Road grade on the roads is estimated to be less than 10%.

6. BUILDING CONSTRUCTION:

There will be no buildings in the scope of this project. There will only be steel towers and electrical lines. The closest structures are a trailer about 0.28 mile southwest of the property, and stick built structures about 2 miles west. The town of Jacumba is 3.75 miles west.

7. FENCING:

There will be no fencing.

8.FIRE PROTECTION SYSTEMS:

There are no buildings in this project so there are no Fire Protection systems required or necessary.

9.AIR OPERATIONS:

The applicant shall obtain letters of approval from CALFIRE Air operations, due to the potential for the operation of CALFIRE aircraft in the area during a fire. In addition, there is a small airport in Jacumba. The towers will need to comply with any applicable FAA regulations, and may need warning lights on them due to proximity of the airport and the potential for Firefighting aircraft to operate in the area.

10.DEFENSIBLE SPACE:

Per this Fire Protection Plan, this site will have 30 feet (30') of fuel modification on all sides of the towers. Within that 30 feet (30'), the area may be cleared, concreted, graveled or vegetation would be cut to 6 inches (6") high.

The PRC, Sections 4292 and 4293 Code require 10-foot (10') clearance from base of poles (or towers) and 10 feet (10') between vegetation and wires.

In addition, the CALFIRE Power Line Fire Prevention Field Guide, dated 10-08, and co authored by Sempra Energy, SDGE, and other power companies requires 10-foot (10') clearance from the base of poles (or towers), 10 feet (10') between vegetation and wires and marking of poles. The requirements in this guide would be complied with, as and where applicable to this line. This guide is on the Office of State Fire Marshal website at OSFM.Fire.Ca.Gov; click "programs", click "Wildland Fire Prevention Engineering", click "Power Line Fire Prevention Field Guide".

ESJ has agreed to provide 30' tower clearance, 10 feet (10') between vegetation and wires, and marking of towers. ESJ would also comply with any new, applicable, regulations by the PUC, CPUC, or other jurisdictional agencies.

It is the strong recommendation of the consultant that there must be no new plants, shrubs, trees, etc planted in the Right of Way or in the area 30 feet (30') on each side of the ROW, as this would increase the fire hazard and present a risk to the towers and the power lines, and can result in potentially causing arcing to the ground from wires during a fire on the ROW. Wires can also slap together during high winds and cause sparks to fall into vegetation. If new vegetation is mandated by the County for screening purposes, then there must be no new vegetation, including trees, in the ROW and 30 feet (30') on each side. In addition there must be no new vegetation, including trees, beyond the 30 feet (30') to each side of the ROW, and on the property, that is found on the Prohibited Plant List attached to this report.

It is understood, from EDAW consultants, that no fuel modification can be done in sensitive habitat, or archeological sites, or if otherwise prohibited, without permission of the County DPLU and the Resource Agencies. It is also understood that the Fire District can require additional Fuel Modification, upon inspection, subject to constraints of the sensitive habitat and Archeological sites. Per EDAW, machinery should not be used for Fuel Modification on the ROW due to the sensitive areas.

During Fuel Modification, consideration would be given, by applicant, to potentials for erosion and slope instability, in order to prevent damage to tower foundations.

11.VEGETATION MANAGEMENT:

Prescribed defensible space would be maintained on at least an annual basis, prior to May 1, or more often as needed by the applicant. All present and future owners/operators must be put on legal notice by a legally binding recorded instrument as to the requirement to maintain the vegetation in a fire safe manner.

12. FIRE BEHAVIOR MODELING

A computerized Fire Behavior Model is not required for this project per the Fire District, or the County DPLU.

However, BEHAVE modeling was done by the consultant to evaluate the on site fire risk and needed fuel modification. The SH-2 model was used. Vegetation canopy height was assumed to be 5'. The results are:

Fire	Flame Length	Rate of Spread	Spotting downwind
Summer	9.4'	0.33 MPH	0.5 miles
Fall	15.8'	1 MPH	1.2 miles

The spotting distance would be 0.4 miles.

The power lines are approximately 150 to 170' above grade.

Note: models are guidelines only. Actual fire behavior can be more or less intensive.

The modeling shows that airborne burning embers may reach a potentially habitable trailer, which is located off the property, about 0.28 miles to the southwest. This may require that a Fire Engine Crew go to that trailer during a fire to provide protection for it, and extinguish spot fires, during a wind driven fire.

13. FIRE DISTRICT REQUIREMENTS:

ESJ LLC agrees, and fully intends, to work with the Rural Fire Protection District Fire Chief to resolve any of his concerns and any Fire District requirements for equipment, mitigation fees, etc. All final approvals and agreements are to be obtained from the Fire Chief. The Fire District has approved this Fire Protection Plan.

14. SUMMARY/DISCLAIMER

Engineering, Architecture, Landscape Architecture, design and construction are out of the scope of this plan and are the responsibility of others. Applicant may submit requests for review and approval of alternative materials and methods which have the same practical effect and equivalency as the materials and methods required or recommended in this plan.

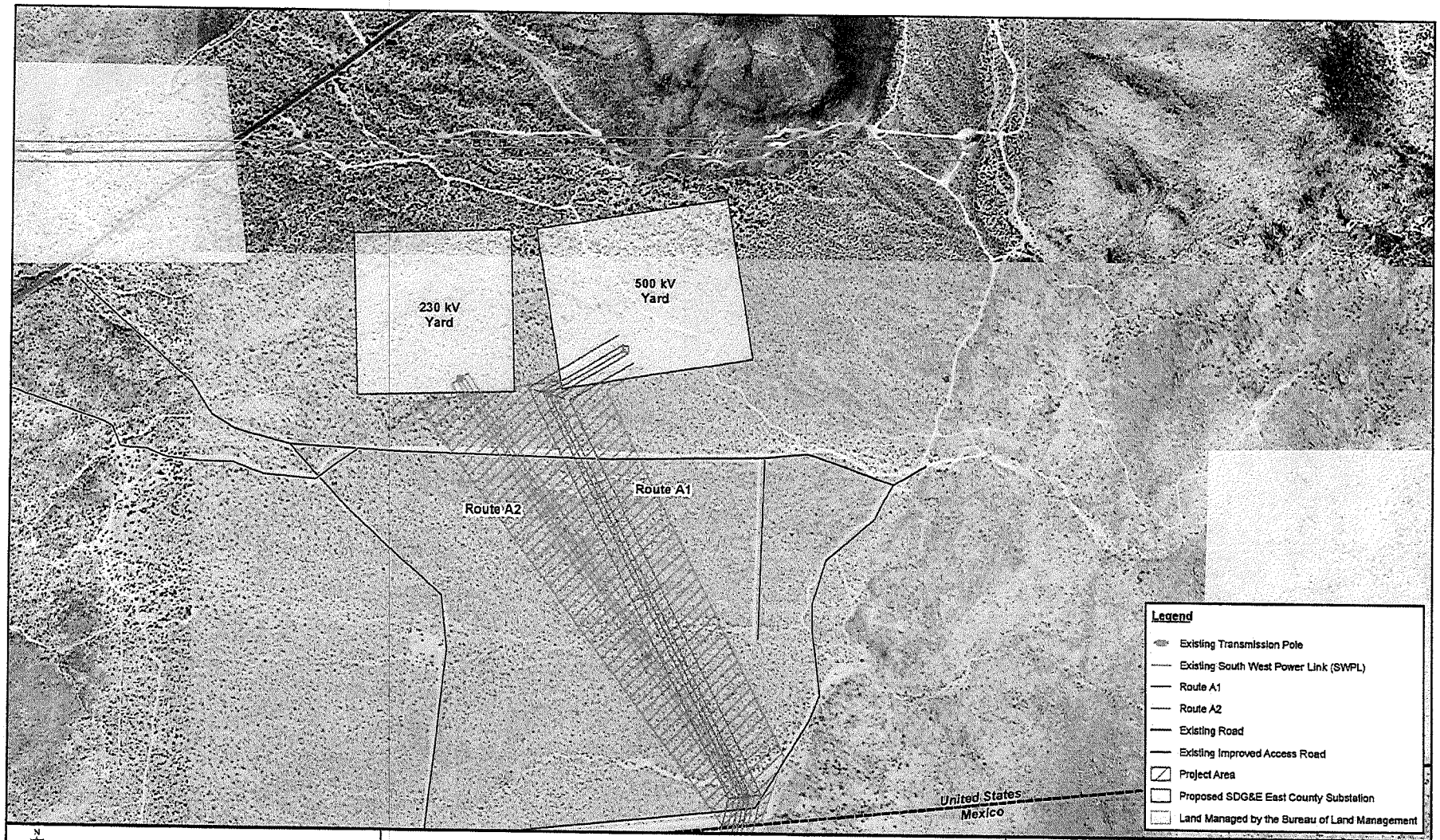
As Fire is unpredictable and dynamic, this plan cannot guarantee that a fire will not occur or will not cause damage to property or injury or death to humans or animals. There are no guarantees made, expressed or implied, regarding the effectiveness or adequacy of any recommendations or requirements in this plan for all fire situations. However, the Fire Protection concepts proposed in this plan should lessen the impact upon the Fire District.

Any official Fire Protection requirements and approvals will be set forth by the RFPD and the County DPLU Fire Marshal.

James W Hunt, President Hunt Research Corporation
Prepared by _____, President. Date 9-18-09

Alberto Alvarez Agreed to on behalf of ESJ U.S. Transmission LLC by (Signature, Date, and printed name)

Attach: Figure 1-2 Project Area Map
Attach: Site Photos
Attach: Prohibited Plant List



Map Reference:

ESJ U.S. Gen-Tie Project

SE San Diego County, California

Figure 1-2
PROJECT AREA MAP

Date:	GIS:	Job Number:
3/2/2009	avh	002510.SG08.01

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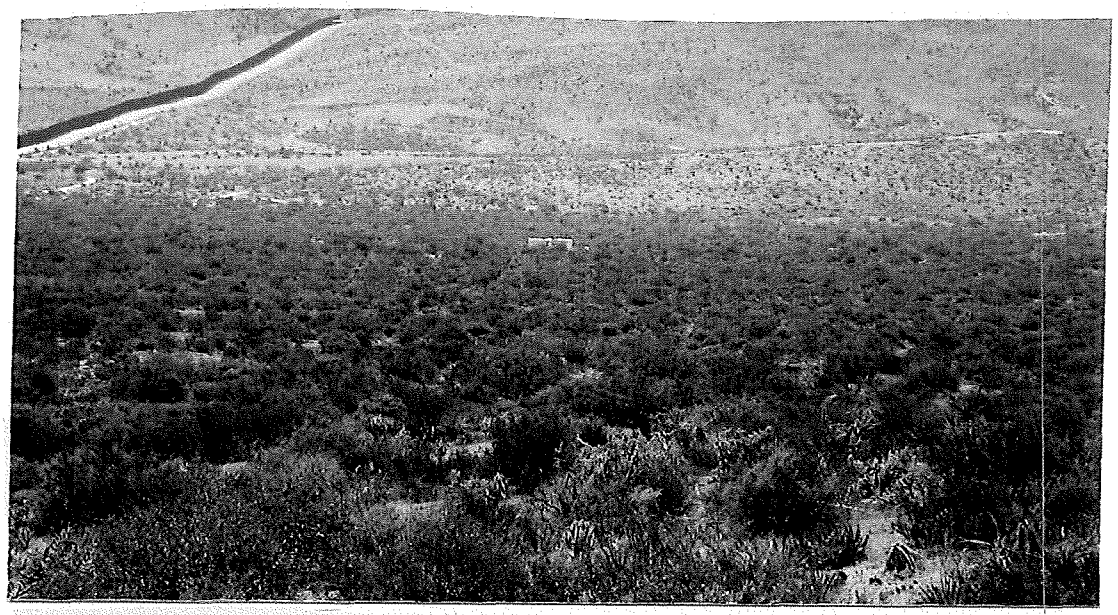
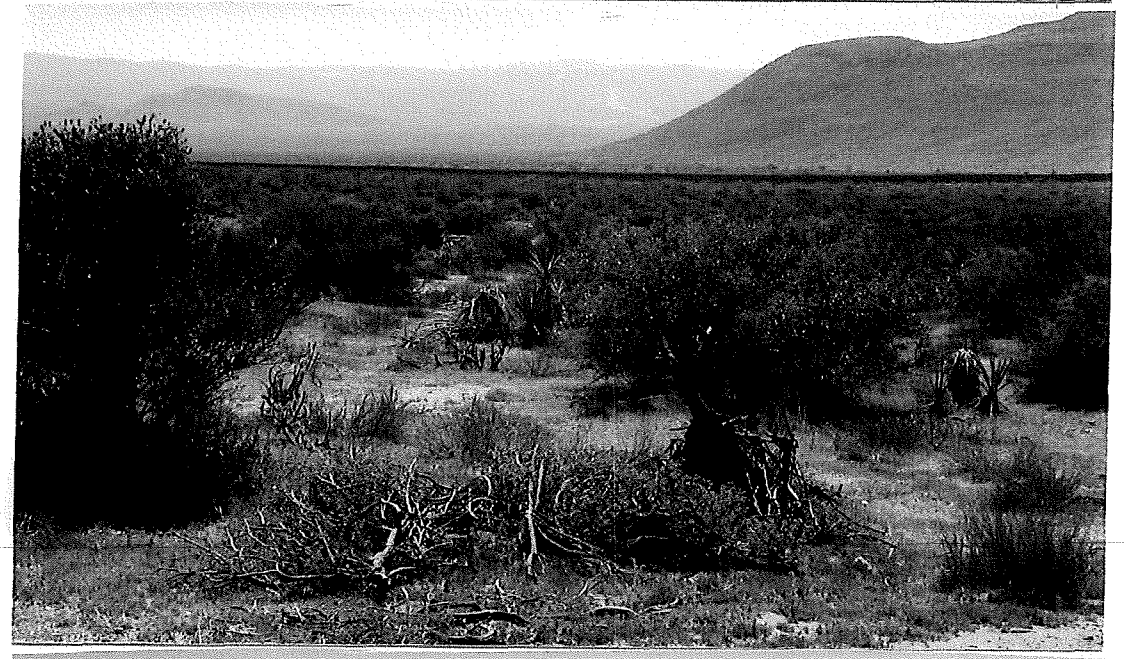
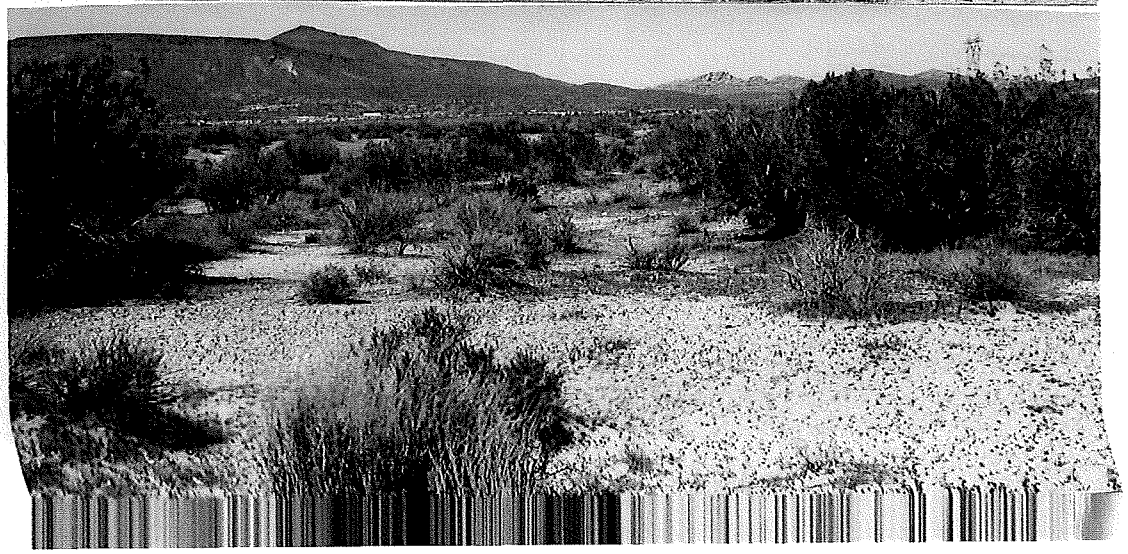
Site Photos: (fence in distance is Border. Top photo shows offsite trailer in distance)







Some Examples of Prohibited Plants

Botanical Name	Common Name	Comment*
Trees		
Abies species	Fir	F
Acacia species (numerous)	Acacia	F, I
Agonis juniperina	Juniper Myrtle	F
Araucaria species (A. heterophylla, A. araucana, A. bidwillii)	Araucaria (Norfolk Island Pine, Monkey Puzzle Tree, Bunya Bunya)	F
Callistemon species (C. citrinus, C. rosea, C. viminalis)	Bottlebrush (Lemon, Rose, Weeping)	F
Calocedrus decurrens	Incense Cedar	F
Casuarina cunninghamiana	River She-Oak	F
Cedrus species (C. atlantica, C. deodara)	Cedar (Atlas, Deodar)	F
Chamaecyparis species (numerous)	False Cypress	F
Cinnamomum camphora	Camphor	F
Cryptomeria japonica	Japanese Cryptomeria	F
Cupressocyparis leylandii	Leyland Cypress	F
Cupressus species (C. fobesii, C. glabra, C. sempervirens,)	Cypress (Tecate, Arizona, Italian, others)	F
Eucalyptus species (numerous)	Eucalyptus	F, I
Juniperus species (numerous)	Juniper	F
Larix species (L. decidua, L. occidentalis, L. kaempferi)	Larch (European, Japanese, Western)	F
Leptospermum species (L. laevigatum, L. petersonii)	Tea Tree (Australian, Tea)	F
Lithocarpus densiflorus	Tan Oak	F
Melaleuca species (M. linariifolia, M. nesophila, M. quinquenervia)	Melaleuca (Flaxleaf, Pink, Cajeput Tree)	F, I
Olea europea	Olive	I
Picea (numerous)	Spruce	F
Palm species (numerous)	Palm	F, I
Pinus species (P. brutia, P. canariensis, P. b. eldarica, P. halepensis, P. pinea, P.	Pine (Calabrian, Canary Island, Mondell, Aleppo, Italian Stone, Monterey)	F

Some examples of Prohibited Plants

Botanical Name	Common Name	Comment*
radiata, numerous others)		
Platycladus orientalis	Oriental arborvitae	F
Podocarpus species (P. gracilior, P. macrophyllus, P. latifolius)	Fern Pine (Fern, Yew, Podocarpus)	F
Pseudotsuga menziesii	Douglas Fir	F
Schinus species (S. molle, S. terebenthifolius)	Pepper (California and Brazilian)	F, I
Tamarix species (T. africana, T. aphylla, T. chinensis, T. parviflora)	Tamarix (Tamarisk, Athel Tree, Salt Cedar, Tamarisk)	F, I
Taxodium species (T. ascendens, T. distichum, T. mucronatum)	Cypress (Pond, Bald, Monarch, Montezuma)	F
Taxus species (T. baccata, T. brevifolia, T. cuspidata)	Yew (English, Western, Japanese)	F
Thuja species (T. occidentalis, T. plicata)	Arborvitae/Red Cedar	F
Tsuga species (T. heterophylla, T. mertensiana)	Hemlock (Western, Mountain)	F
Groundcovers, Shrubs & Vines		
Acacia species	Acacia	F, I
Adenostoma fasciculatum	Chamise	F
Adenostoma sparsifolium	Red Shanks	F
Agropyron repens	Quackgrass	F, I
Anthemis cotula	Mayweed	F, I
Arbutus menziesii	Madrone	F
Arctostaphylos species	Manzanita	F
Arundo donax	Giant Reed	F, I
Artemisia species (A. abrotanium, A. absinthium, A. californica, A. caucasica, A. dracunculus, A. tridentata, A. pynocephala)	Sagebrush (Southernwood, Wormwood, California, Silver, True tarragon, Big, Sandhill)	F
Atriplex species (numerous)	Saltbush	F, I
Avena fatua	Wild Oat	F
Baccharis pilularis	Coyote Bush	F
Bambusa species	Bamboo	F, I
Bougainvillea species	Bougainvillea	F, I
Brassica species (B. campestris, B. nigra, B. rapa)	Mustard (Field, Black, Yellow)	F, I

Some examples of Prohibited Plants

Botanical Name	Common Name	Comment*
Bromus rubens	Foxtail, Red brome	F, I
Castanopsis chrysophylla	Giant Chinquapin	F
Cardaria draba	Hoary Cress	I
Carpobrotus species	Ice Plant, Hottentot Fig	I
Cirsium vulgare	Wild Artichoke	F,I
Conyza bonariensis	Horseweed	F
Coprosma pumila	Prostrate Coprosma	F
Cortaderia selloana	Pampas Grass	F, I
Cytisus scoparius	Scotch Broom	F, I
Dodonaea viscosa	Hopseed Bush	F
Eriodictyon californicum	Yerba Santa	F
Eriogonum species (E. fasciculatum)	Buckwheat (California)	F
Fremontodendron species	Flannel Bush	F
Hedera species (H. canariensis, H. helix)	Ivy (Algerian, English)	I
Heterotheca grandiflora	Telegraph Plant	F
Hordeum leporinum	Wild barley	F, I
Juniperus species	Juniper	F
Lactuca serriola	Prickly Lettuce	I
Larix species (numerous)	Larch	F
Larrea tridentata	Creosote bush	F
Lolium multiflorum	Ryegrass	F, I
Lonicera japonica	Japanese Honeysuckle	F
Mahonia species	Mahonia	F
Mimulus aurantiacus	Sticky Monkeyflower	F
Miscanthus species	Eulalie Grass	F
Muhlenbergia species	Deer Grass	F
Nicotiana species (N. bigelovii, N. glauca)	Tobacco (Indian, Tree)	F, I
Pennisetum setaceum	Fountain Grass	F, I
Perovskia atroplicifolia	Russian Sage	F
Phoradendron species	Mistletoe	F
Pickeringia montana	Chaparral Pea	F
Rhus (R. diversiloba, R. laurina, R. lentii)	Sumac (Poison oak, Laurel, Pink Flowering)	F
Ricinus communis	Castor Bean	F, I
Rhus Lentii	Pink Flowering Sumac	F

Some examples of Prohibited Plants

Botanical Name	Common Name	Comment*
Rosmarinus species	Rosemary	F
Salvia species (numerous)	Sage	F, I
Salsola australis	Russian Thistle	F, I
Solanum Xantii	Purple Nightshade (toxic)	I
Silybum marianum	Milk Thistle	F, I
Thuja species	Arborvitae	F
Urtica urens	Burning Nettle	F
Vinca major	Periwnkle	I

*F = flammable, I = Invasive

NOTES:

1. Plants on this list that are considered invasive are a partial list of commonly found plants. There are many other plants considered invasive that should not be planted in a fuel modification zone and they can be found on The California Invasive Plant Council's Website www.cal-ipc.org/ip/inventory/index.php. Other plants not considered invasive at this time may be determined to be invasive after further study.
2. For the purpose of using this list as a guide in selecting plant material, it is stipulated that all plant material will burn under various conditions.
3. The absence of a particular plant, shrub, groundcover, or tree, from this list does not necessarily mean it is fire resistive.
4. All vegetation used in Vegetation Management Zones and elsewhere shall be subject to approval of the Fire Marshal.
5. Landscape architects may submit proposals for use of certain vegetation on a project specific basis. They shall also submit justifications as to the fire resistivity of the proposed vegetation.
6. This list was prepared by Hunt Research Corporation and Dudek and associates and reviewed by, Scott Franklin Consulting co.

July 15, 2009

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123-1666

Re: Gen-Tie FPP Approval

Dear Planner,

The San Diego Rural Fire Protection District has reviewed the fire protection plan submitted by the Hunt Research Corporation. The plan meets the objectives of the California Fire Code 2007 edition, as well as the Fire Districts requirements for discretionary projects. Please call me directly with any questions that you may have.

Sincerely,

David R. Nissen
Division Chief

ERIC GIBSON
DIRECTOR

County of San Diego

DEPARTMENT OF PLANNING AND LAND USE
FIRE SERVICES SECTION

5201 RUFFIN ROAD, SUITE B, SAN DIEGO, CALIFORNIA 92123-1666
INFORMATION (858) 694-2960
TOLL FREE (800) 411-0017
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November 25, 2009

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123

Attn: Patrick Brown, Project Planner

RE: MUP 09-008 – ESJ US GEN-TIE
San Diego Rural Fire Protection District
Revised Fire Protection Plan - incomplete

We have examined the revised Fire Protection Plan (FPP) – Letter Report prepared by Hunt Research Corporation, dated September 10, 2009, for compliance with the County Fire Code, County Building Code and CCR Title 14, "SRA Fire Safe Regulations". The proposed project would consist of a 2 mile long single circuit 500 kV line or a double-circuit 230 kV line supported of three to five 150-foot steel lattice towers or 170-foot steel monopoles in area approximately 4 miles east of Jacumba.

All corrections identified in our letter dated July 8, 2009 have been incorporated into the revised FPP. We again support the consultant's recommendation that no new vegetation be planted for screening purposes that would compromise fuel management.

We have not received documentation of acceptance by the local fire authority – San Diego Rural Fire Protection District – as of this date. We will be in a position to accept it when the local fire authority does.

Paul Dawson, Fire Marshal
San Diego County Fire Authority
Department of Planning and Land Use

c: Dave Nissen, Fire Chief, San Diego Rural Fire Protection District

EDAW | AECOM

EDAW Inc
1420 Kettner Boulevard, Suite 600, San Diego, California 92101
T 619.233.1454 F 619.233.0952 www.edaw.com

May 19, 2009

Ms. Joan Heredia
Sempra Generation
101 Ash Street
San Diego, CA 92101

Dear Ms. Heredia:

Subject: Energia Sierra Juarez (ESJ) U.S. Transmission Gen-Tie Fire Clearing

EDAW AECOM (EDAW) biologists have evaluated the ESJ U.S. Transmission Gen-Tie project area for biological resources and have determined that there are two sensitive habitat types present, Sonoran Mixed Woody Scrub and Peninsular Juniper Woodland and Scrub. In addition, several sensitive wildlife species, such as California horned lark and San Diego black-tailed jackrabbit, have been found or detected on or adjacent to the project site. Impacts to the two sensitive habitat types and associated wildlife would be considered significant by the County of San Diego under the California Environmental Quality Act (CEQA). Mitigation for impacts to the vegetation is recommended at a 1:1 ratio through the preservation of similar on-site habitat.

The primary objectives of CEQA are to disclose to the public and decision makers the potential environmental impacts associated with a proposed project and to require the agency approving the project to avoid or reduce the environmental effects by implementing feasible alternatives or mitigation measures. CEQA requires that every project avoid, reduce, or mitigate significant environmental impacts, including those to biological resources.

CEQA also requires that mitigation be provided for projects that expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Therefore, the goal of avoiding and minimizing impacts to biological resources must be balanced with the need for protection from wildland fires.

The Sonoran Mixed Woody Scrub and Peninsular Juniper Woodland and Scrub grow to a maximum height of approximately six feet and provide ground coverage of approximately 35 percent within the ESJ Gen-Tie right-of-way. Overall the vegetation is open, with unvegetated areas or herbaceous ground cover occurring between shrubs. There are no structures or adjacent urbanized areas in close proximity to the project site and there is a network of dirt roads, including the road along the U.S./Mexico border fence. Vegetation will be cleared for the construction of 3-5 lattice towers or monopoles, an access road, and a 30-foot clear zone around each tower or pole site. Additional clearing of vegetation adjacent to towers, poles, and roads may be required at the discretion of the Fire Marshall.

It is recommended that fire clearing requirements be site-specific so as to prevent the unnecessary clearing of sensitive natural habitats while providing the ability to avoid or rapidly suppress wildland fires in the project area. Mitigation at a 1:1 ratio will be required for all cleared vegetation. Please call me at (619) 233-1454 if you have any questions.

Sincerely,

Michael L. Page

Michael L. Page, AICP
Senior Project Manager
Michael.Page2@aecom.com

Attachment 2

Abreu, Alberto

From: Tim Murphy [timothy.murphy@cardno.com]
Sent: Friday, March 04, 2011 4:14 PM
To: Abreu, Alberto
Cc: Brad Boyes; Jerry.Pell@hq.doe.gov
Attachments: ESJ EIS Appendix F emissions tables revised 03-04-11.xlsx

Alberto,

As per your request, enclosed are revised air quality emissions estimates for the ESJ Project. The estimates, as detailed in Appendix F of the ESJ Project Draft EIS, are updated to reflect further information provided from Sempra regarding anticipated project construction activities, and to apply the updated (January 2011) EPA method for calculating paved road dust emissions. Revisions to the estimate inputs and results are summarized below.

SUMMARY OF REVISIONS TO ESJ AIR QUALITY EMISSIONS ESTIMATES

The ESJ Draft EIS emissions estimates were cited in the CPUC/BLM's Draft EIR/S for ECO Substation/Tule Wind/ESJ Projects. Project description inputs provided by Sempra in March 2011 resulted in refinement to certain assumptions that were used in the Draft EIS emissions estimate model. The following adjustments were made to the emissions assumptions:

- The Round trip (RT) distance for heavy trucks carrying export soil to a landfill is increased from 50 mile round trip to 90 miles round trip. This is based on a 45 mile trip from the project site to the El Centro landfill.
- The assumed number of peak daily truck trips used for export dirt hauling is reduced from 25 trips to 12 trips, or to 1,080 vehicle miles travelled (VMTs).
- The overall volume of road grading spoils unchanged (requiring an estimated 576 truck trips using high capacity trucks, based on preliminary grading estimates); therefore, the overall schedule for export hauling is increased from 24 days to 48 days (8 weeks, 6 days/week).
- The percent of truck travel miles on unpaved vs paved roads is decreased from 20% to 5% to reflect the relatively short distances that will be travelled on unpaved roads (i.e., the vast majority of travel miles for these vehicle trips will be on paved roads; whereas a very small proportion of each trip will be on the project site itself, which is unpaved, or other unpaved surfaces along the travel route). This is likely conservative because it assumes up to 4.5 miles of off-road travel for each truck trip. Based on the site location and construction plans, the actual off-road could be considerably less than this 4.5 mile distance.
- Soil moisture content is deceased, and resulting dust control efficiency (i.e., the effectiveness of watering) is decreased from 95% to 90% which is more conservatively representative of the onsite soils.

A further refinement was made to the emissions estimates by applying the new EPA method for calculating paved road dust emissions (EPA January 2011, AP-42 Chapter 13.2.1). Other parameters used in the emissions estimates are unchanged at this time.

The resulting peak daily PM10 emissions (the sum of Combustion Particulate PM10 and Fugitive Dust PM10) are reduced from 286 lb. to 88 lb. This reduction is largely due to the reduction in off-road miles travelled by heavy trucks hauling excess soil from the site to a landfill during a peak day.

It is important to note that the peak daily emissions estimates assume a worst-case scenario where that the road construction and soil hauling activity will be concurrent with other onsite transmission line construction activities. Phasing of activities will further reduce the peak daily emissions and allow for an increase in vehicle trips per day.

Call if you have any questions or need additional information.

Regards,
Tim

Timothy J. Murphy, AICP
Senior Consultant / Environmental Management
Cardno ENTRIX

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Attachment 3